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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

October 20, 1994

EX PARTE

William F. Caton
Acting Secretary
Federal Communications Commission
Mail Stop 1170
1919 M Street, N.W., Room 222
Washington, D.C. 20554

Dear Mr. Caton:

Re: *CC Docket No. 94-1, Price Cap Performance Review for Local Exchange Carriers*

Today, Nancy Lubamersky, Jon Boisseau, and Don Brown, all of Pacific Bell, and I met with Dan Grosh, Anthony Bush, Alex Belinfante, and Joanne Wall of the Tariff Division to discuss Pacific's position in the above-referenced proceeding, including an adaptive framework to address the competitive environment in a few highly competitive areas. The attached documents were used during this meeting. Please associate this material with this proceeding.

We are submitting two copies of this notice in accordance with Section 1.1206(a)(1) of the Commission's Rules.

Please stamp and return the provided copy to confirm your receipt. Please contact me should you have any questions or require additional information concerning this matter.

Sincerely,

J. A. Goddard

Attachments

cc (w/o Attachments): Dan Grosh
Anthony Bush
Alex Belinfante
Joanne Wall

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List A B C D E

AN ECONOMICALLY SOUND PRICE CAP PLAN IS NEEDED.

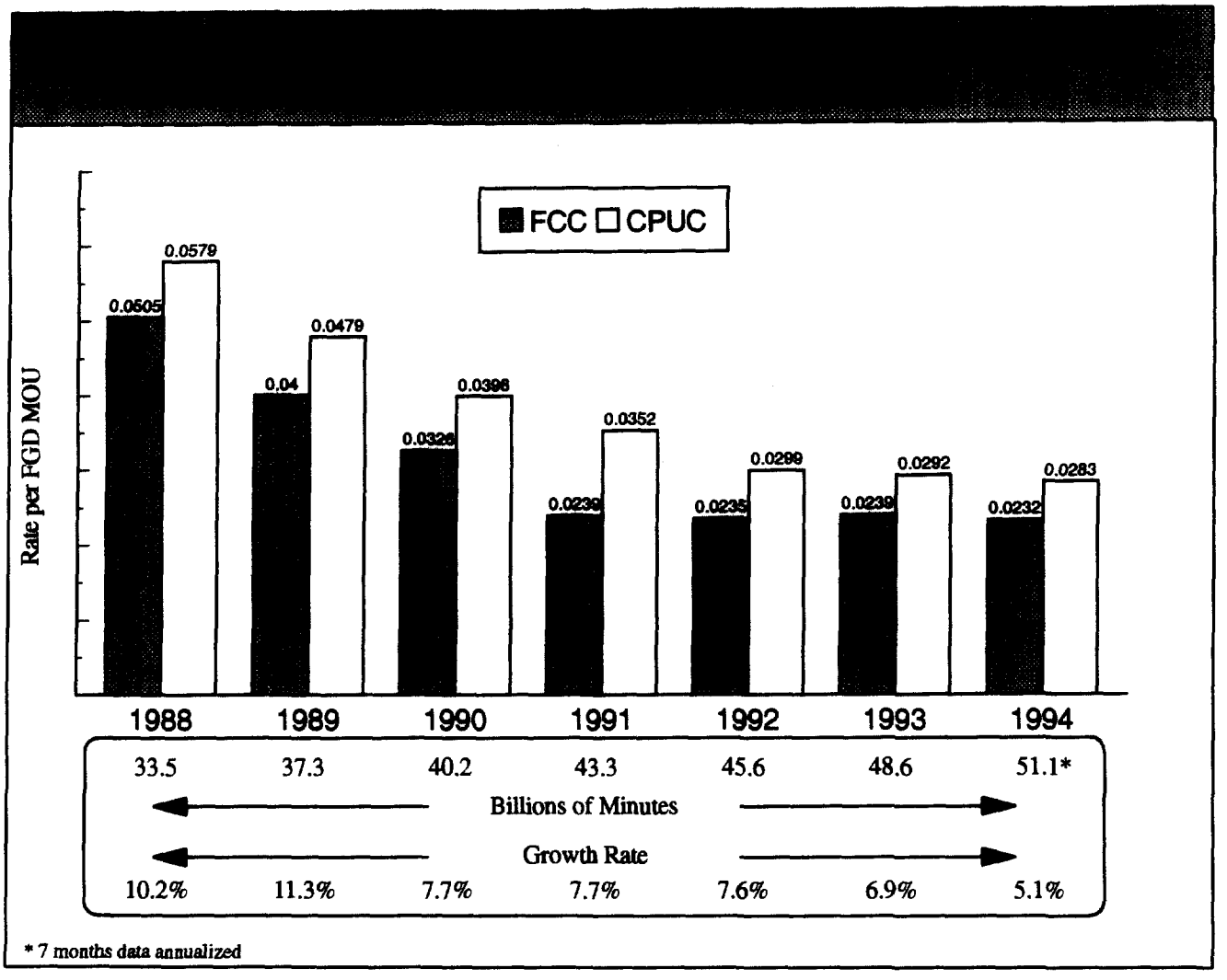
- **Eliminate the backstop mechanisms**
  - ◊ Improve efficiency incentives
  - ◊ Hasten deployment of the NII
  - ◊ Attract investors at less cost
  - ◊ Enable depreciation reform
  - ◊ Reduces cross subsidy concerns

- **Establish a reasonable productivity target**
  - ◊ Compounding effect produces disincentives for investment
  - ◊ Total factor productivity data
  - ◊ Eliminate "g" in common line formula
  - ◊ Competition will erode the LECs' historical productivity levels
  - ◊ Interstate earnings should not be used to establish or reset the productivity target
    - Cost allocations distort earnings levels
    - Unrealistically low depreciation rates overstate reported results

- **Only few exogenous cost adjustments are needed**
  - ◊ Separations reform
  - ◊ Accounting changes
  - ◊ NECA long term support

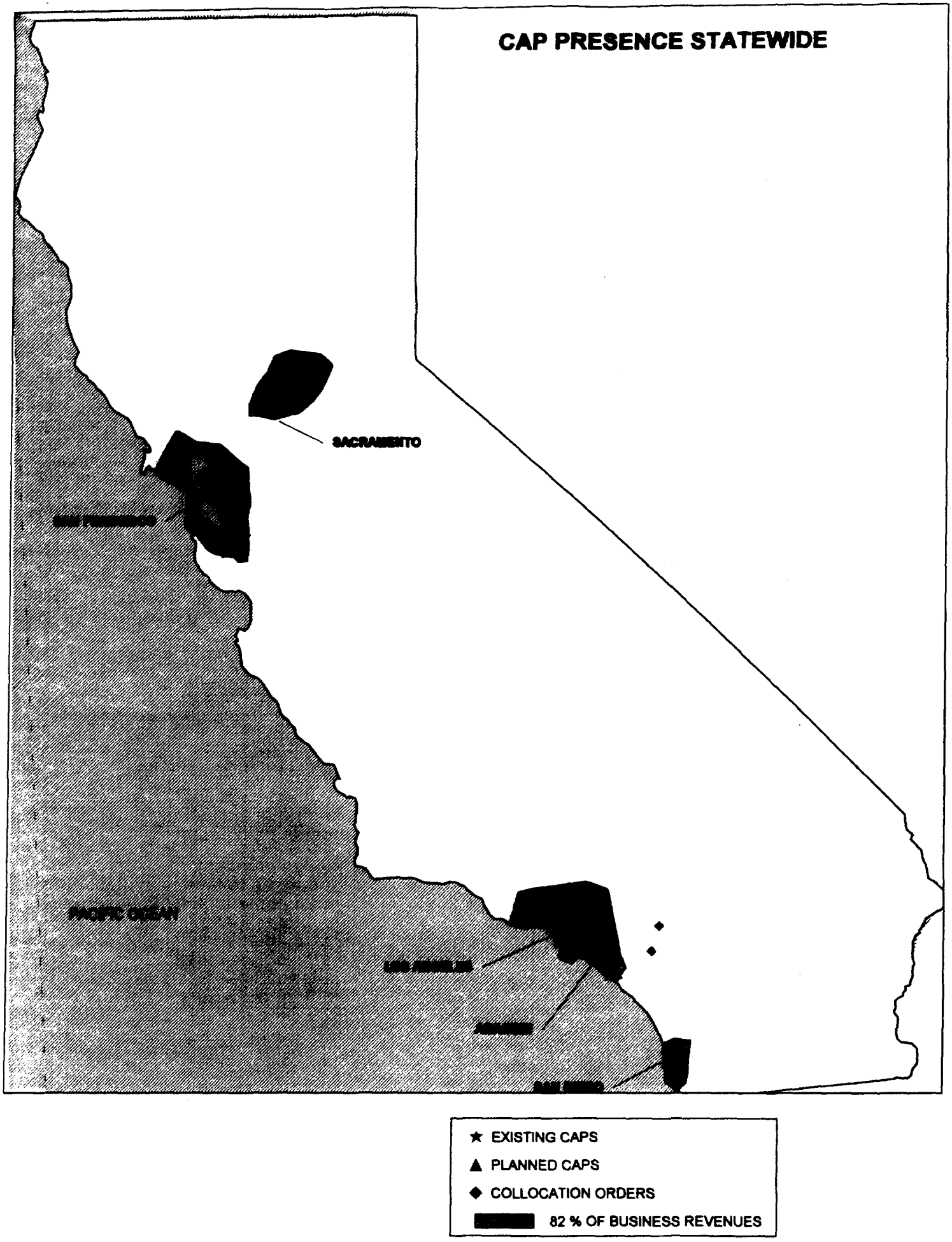
- **Adopt an adaptive framework to address the competitive environment in a few highly competitive areas**

An Overview of the California Market



In California:

- *1% of the land area produces 49% of the business calling revenues*
- *Half of the business lines are in 10% of the wire centers*
- *One third of all interstate access minutes come from 8% of the wire centers*
- *90% of interstate HICAP circuits are in 12% of the wire centers*
- *As of September we have received orders or bona fide requests for collocation in 47 wire centers*
- *The four largest metro areas, Los Angeles, San Francisco, San Diego, and Sacramento account for 82% of Pacific's business revenues.*
- *California is served by 163 IECs - 90 serve any part of only 3 or fewer LATAs*

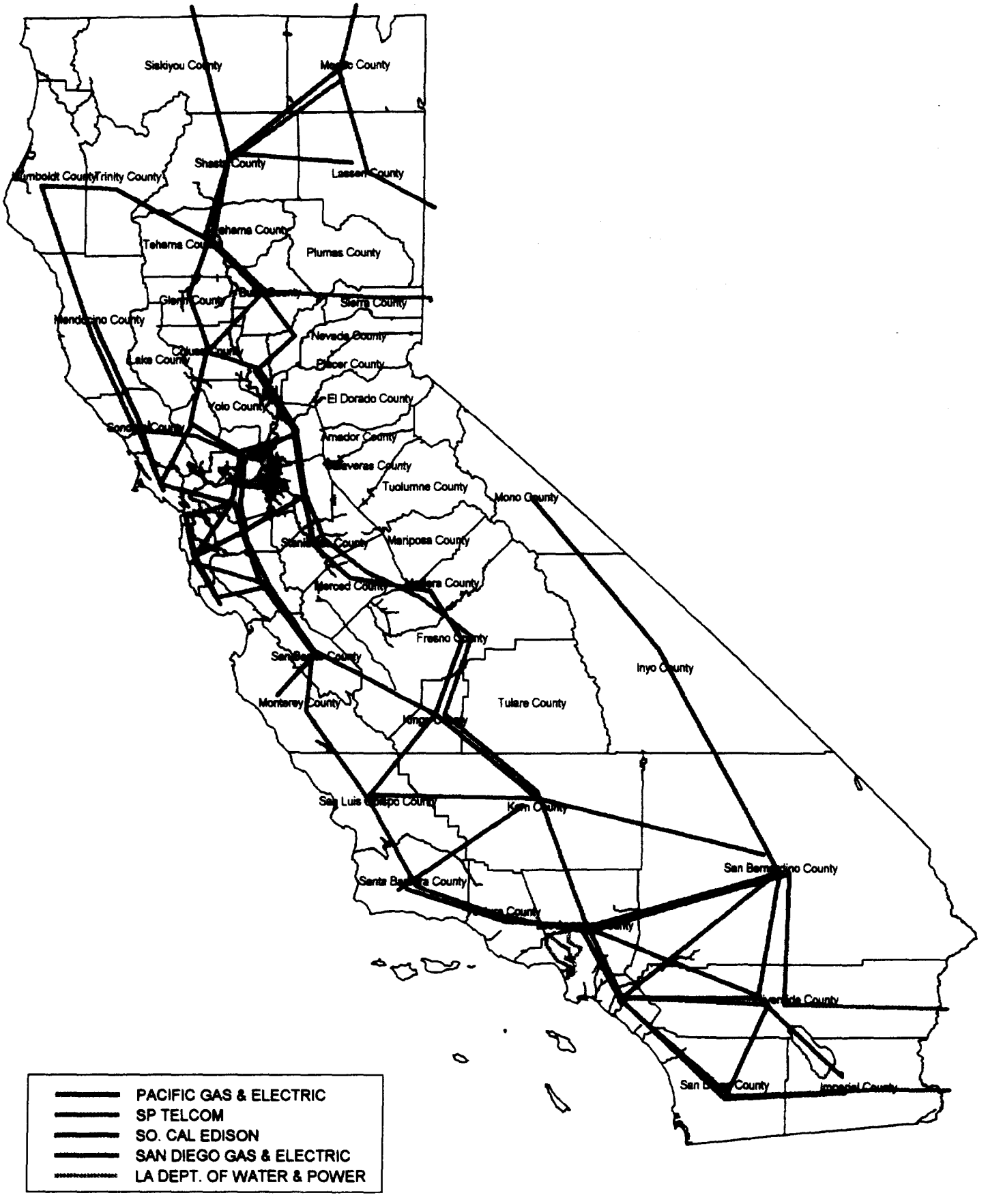

CAP PRESENCE STATEWIDE
SACRAMENTO
PACIFIC OCEAN
EXISTING CAPS
PLANNED CAPS
COLLOCATION ORDERS
82 % OF BUSINESS REVENUES

Competitive Access Providers in California

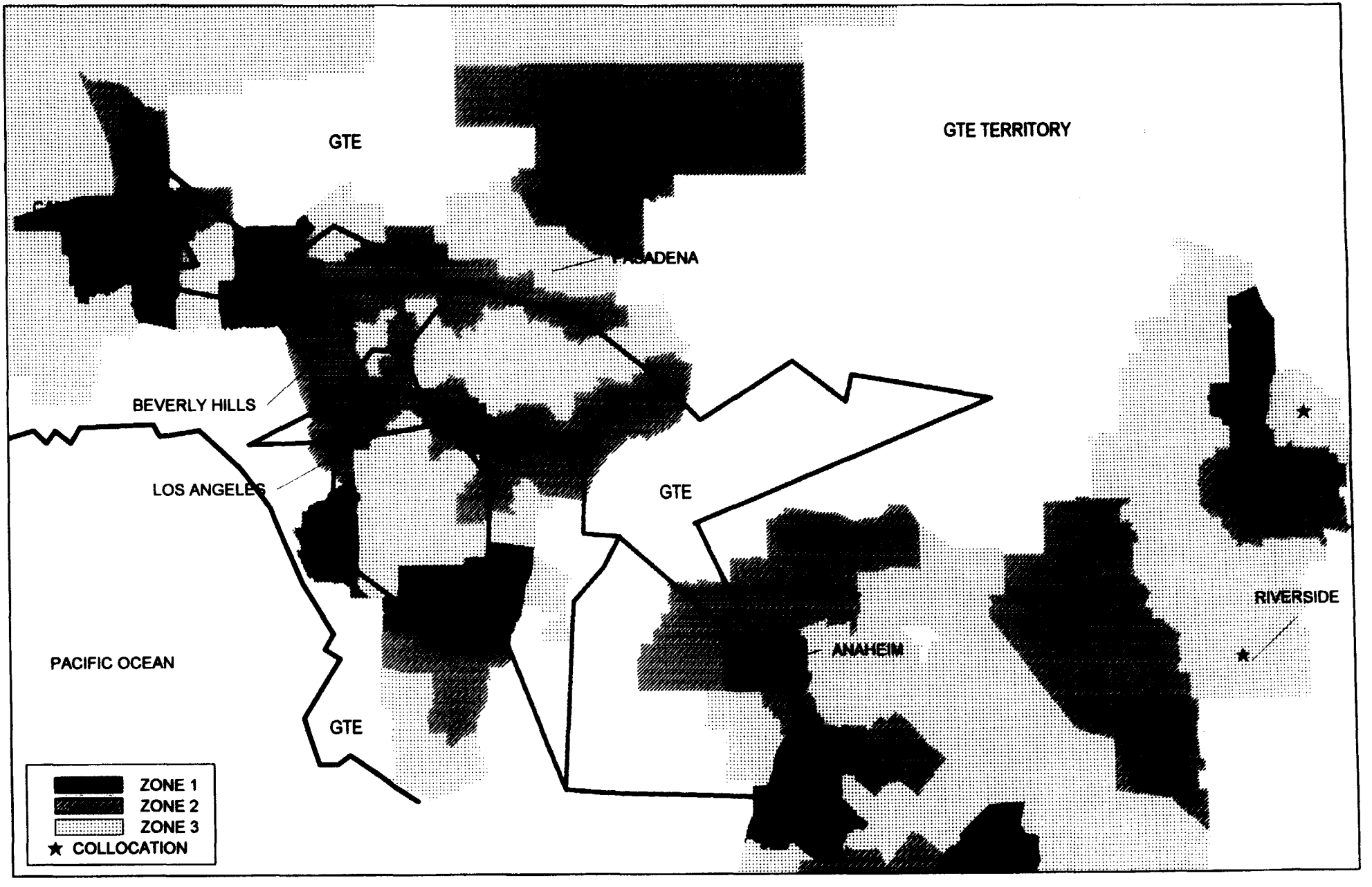
	City	MFS	Teleport	ICG	ELI	Linkatel	Fiberlink
Existing	Anaheim		X				
	Bel Air	X					
	Beverly Hills	X	X				
	Burbank	X	X				
	Century City	X	X				
	Compton		X				
	Culver City		X	X			
	East Los Angeles			X			
	El Monte		X				
	El Segundo	X	X				
	Fremont		X				
	Foster City	X	X				
	Gardena	X	X				
	Glendale		X	X			
	Hollywood	X	X				
	LA Airport	X	X	X			
	Lakewood					X	
	Lancaster			X			
	Lodi			X			
	Los Angeles	X	X	X			
	Kearney Mesa	X	X			X	
	La Jolla		X			X	
	Mission Valley	X	X			X	
	Milpitas		X	X			
	Oakland		X	X			
	Rancho Cordova			X			
	Sacramento						X
	San Bernadino			X			
	San Bruno	X	X				
	San Mateo	X	X				
	San Diego				X	X	
	San Francisco	X	X	X			
	San Jose		X				
	Santa Clara	X	X	X			X
	Sherman Oaks	X	X				
	Van Nuys		X				
	Woodland Hills		X				
Planned	Burlingame	X					
	Concord						X
	Cupertino	X					
	Cypress					X	
	Lafayette		X				
	La Jolla		X			X	
	Menlo Park	X					
	Millbrae	X					
	Mountain View	X					
	Newport Beach					X	
	Palo Alto	X	X				
	Pleasanton		X				
	Redwood City	X					
	San Carlos	X					
	Santa Ana					X	
	San Diego				X		
	Santa Monica		X				

*Source: **USTA Reply: FCC Price CAP Review,** Prof. Robert Harris, June 11, 1994*

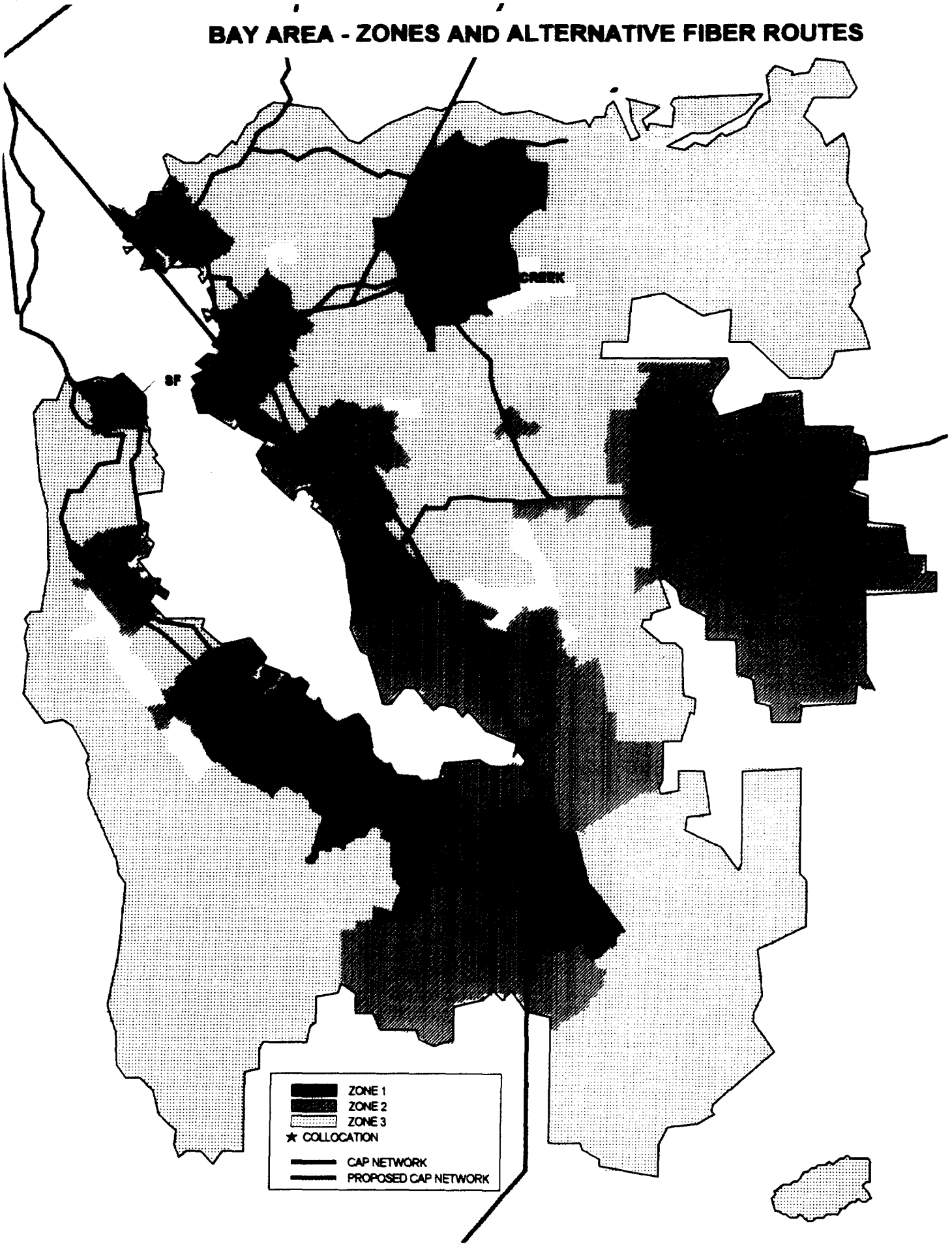
EMERGING COMPETITION - FIBER ROUTES



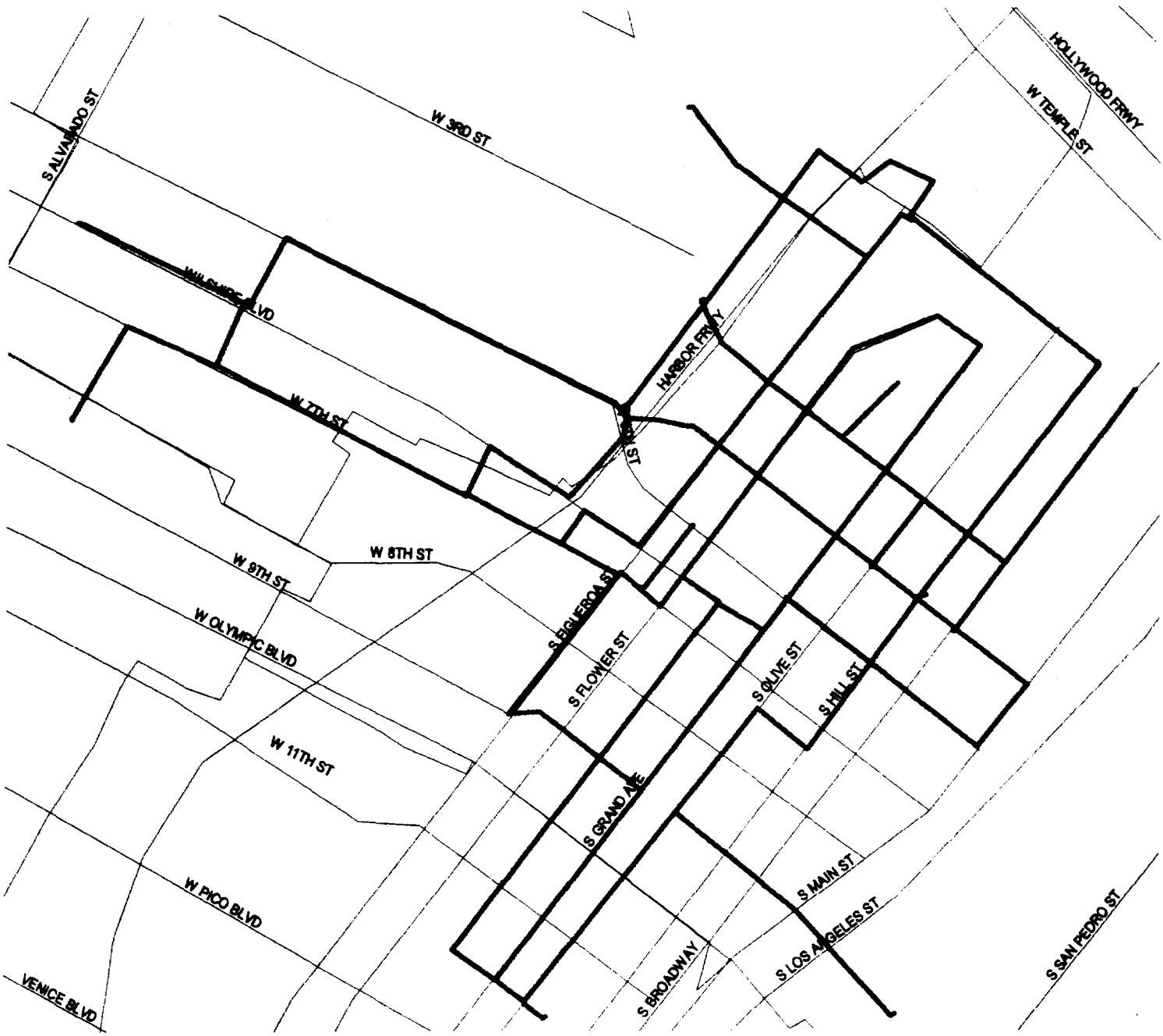
LOS ANGELES REGION - ZONES & ALTERNATIVE FIBER ROUTES



BAY AREA - ZONES AND ALTERNATIVE FIBER ROUTES



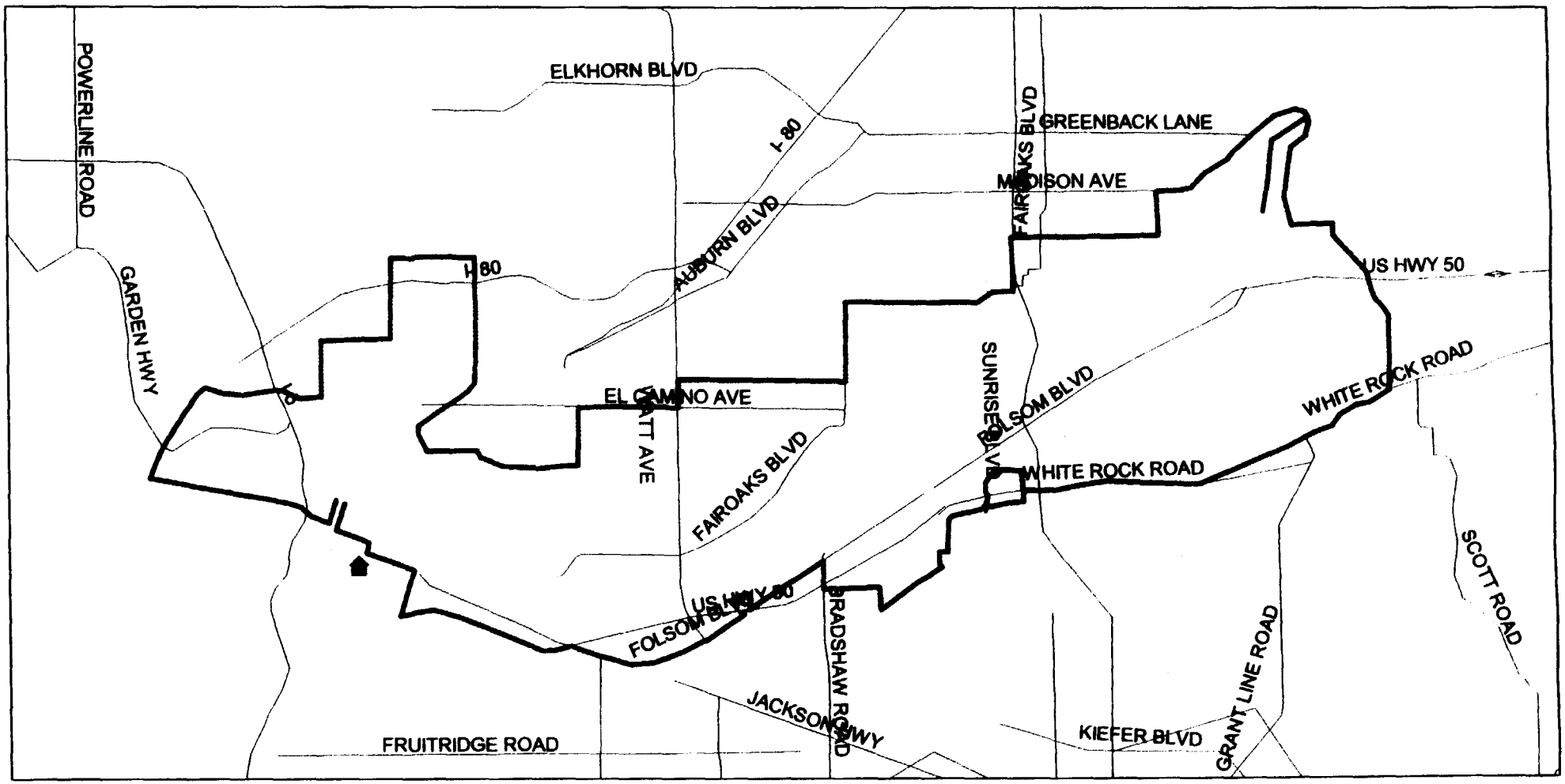
CAP NETWORKS
DOWNTOWN LOS ANGELES



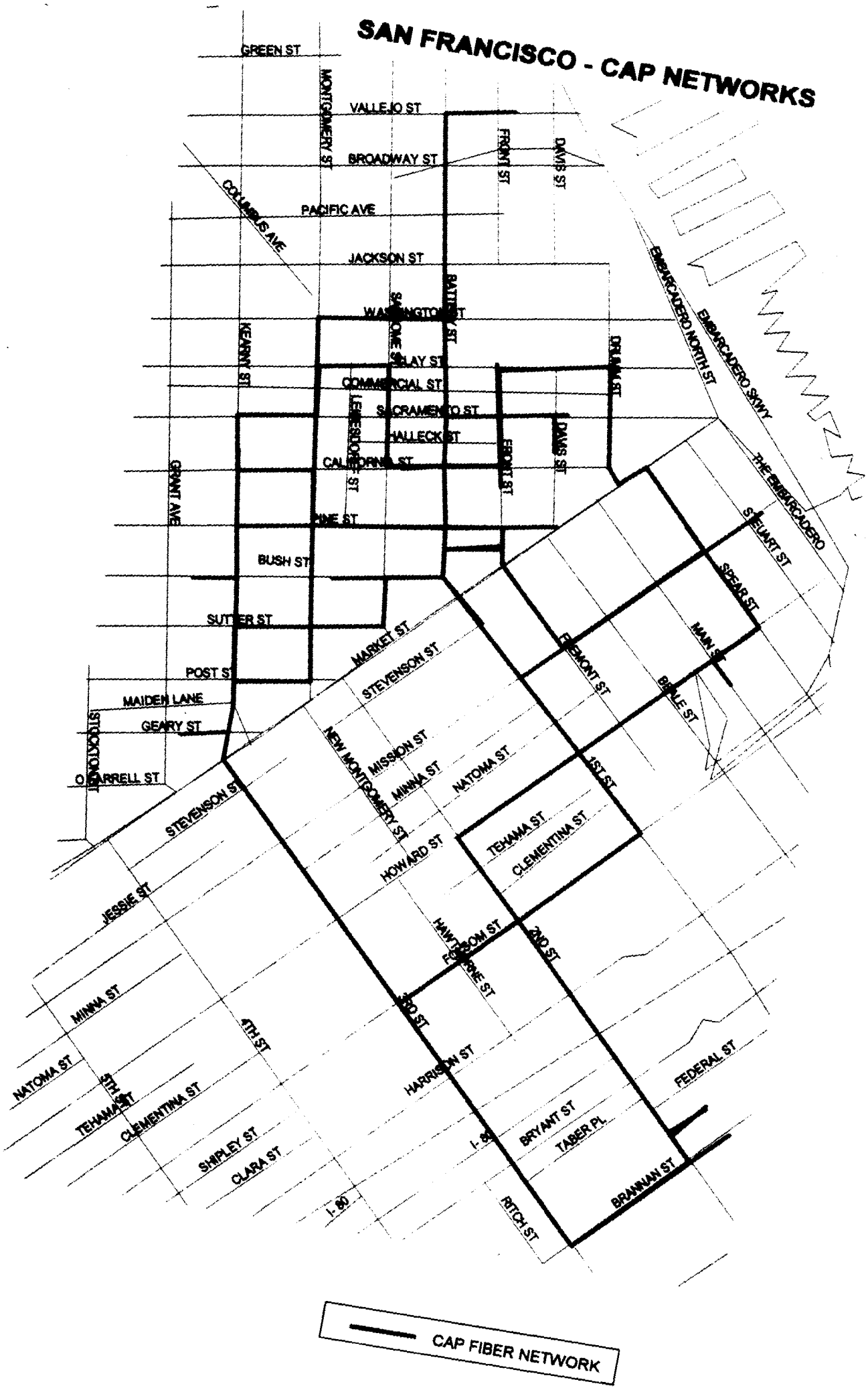
CAP FIBER NETWORK

SILICON VALLEY - CAP NETWORKS
(SAN JOSE AREA)

CAP NETWORKS
SACRAMENTO



SAN FRANCISCO - CAP NETWORKS



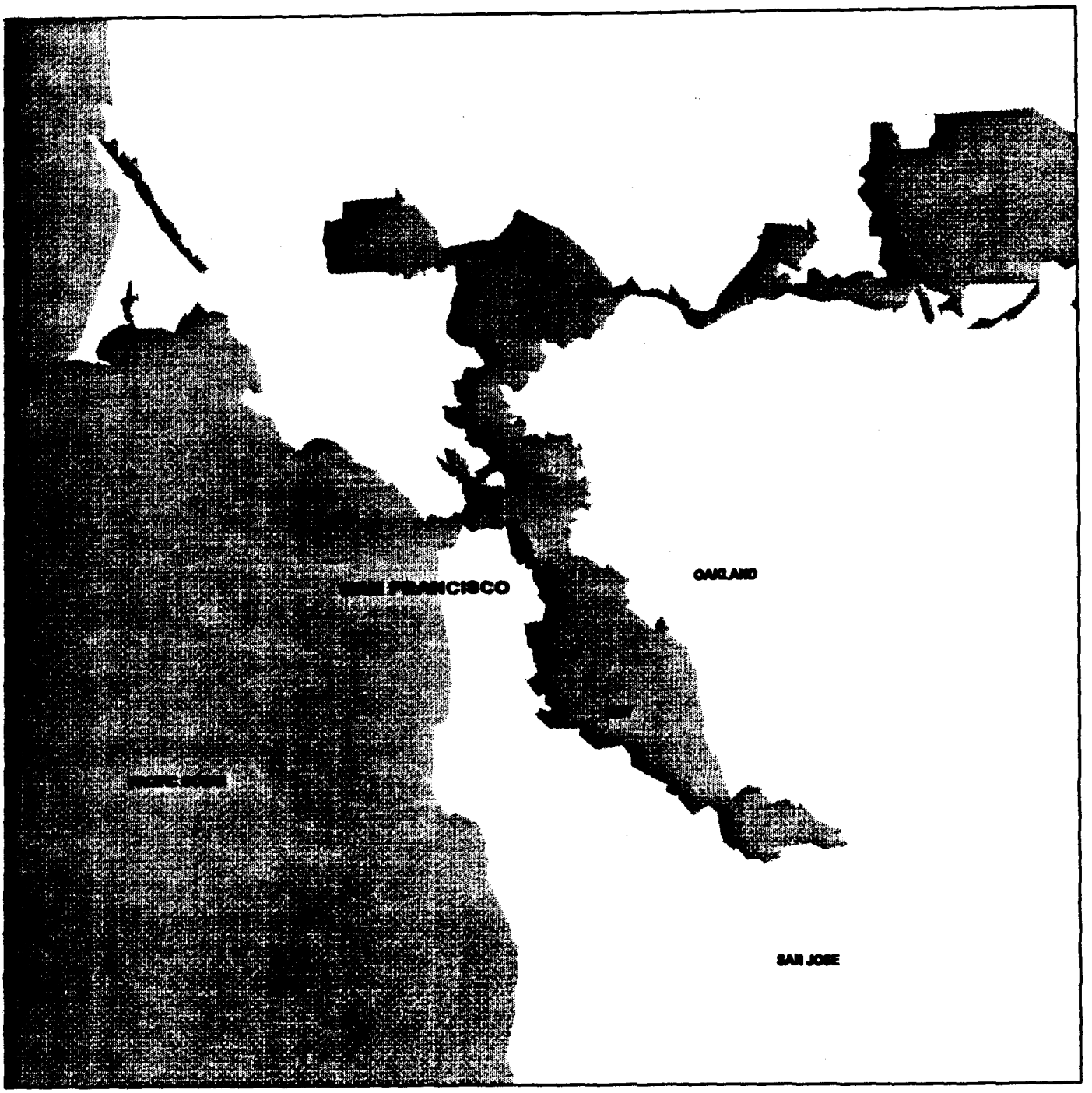
CAP FIBER NETWORK

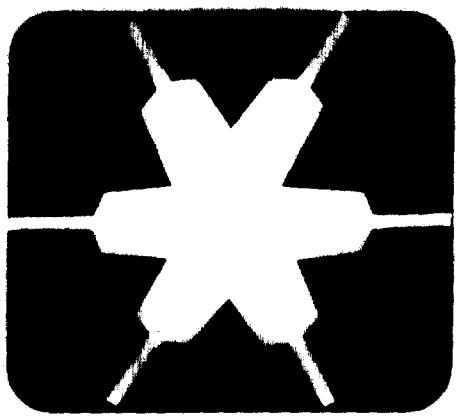
Competitive Market Area Demonstration

The following is a sample application of USTA's proposal for a Competitive Market Area showing. Using the assumptions listed below, we determined that over 90% of Pacific's switched and special access demand was addressable by the existing CAP network in the two wire centers studied.

- The relevant markets used in the study were two Pacific Bell wire centers in downtown San Francisco
- The study assumed that customers within 1000 ft. of a CAP network had an alternative to Pacific Bell, and were therefore **addressable** by the competitior
- If a customer was addressable by a competitor, then all that customer's traffic was addressable
- In this study, residence customers were not assumed to be potential CAP customers

SAN FRANCISCO BAY AREA - CALIFORNIA





Access Competition in California

Pacific Bell **September 1994**

Scope

In the NRPM, the Commission asked, among other things:

1. What is the current state of competition for local exchange and interstate access?
2. What ability do CAPs and others have to compete with LECs? What data indicate the level of actual and potential competition from CAPs and other providers?

This paper responds briefly to these two questions.

1. The Current State of Competition for Local Exchange and Interstate Access Services

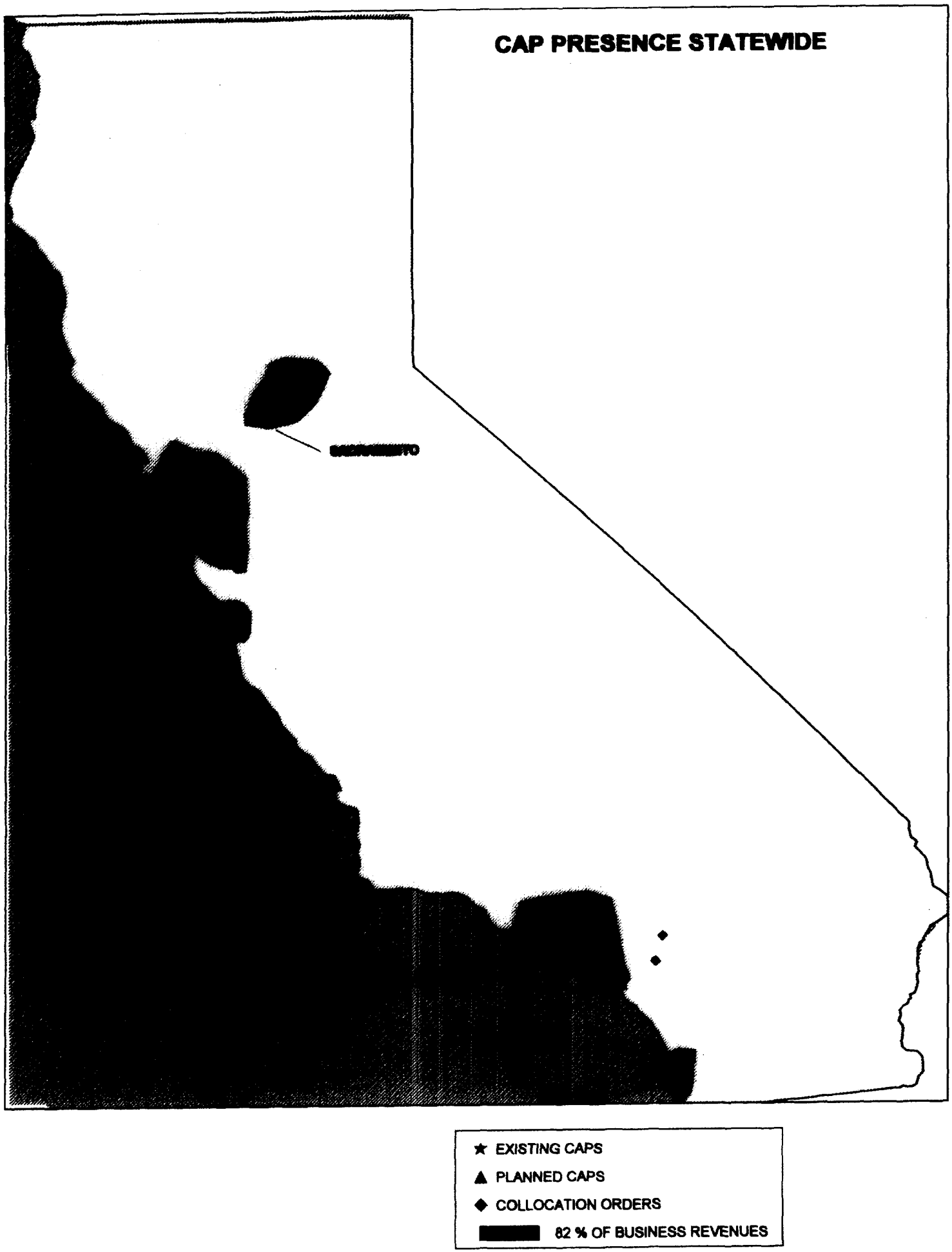
A. The "99%" Problem

Before we present any information on this subject, we have to undertake the formidable task of correcting some misinformation that has been disseminated. For example, our competitors have frequently alleged that we have 99% of the "local access market." That statistic is wrong and what it purports to prove is irrelevant.

First, it doesn't segment the market in any way that is economically meaningful. It combines the comparatively few areas where we make a profit with the many where we don't. A complete reform of the access rules would end the subsidy from high-profit low-cost markets to low-profit high-cost markets. But until that reform occurs our ubiquity has no intrinsic advantage. It's simply an incentive to cherry-picking and inefficient entry by other providers. Our competitors don't treat "local access" as a single market. They enter the **markets** that are lucrative because of high demand and low cost, and avoid the rest.

If one analogy may illuminate this it's the U.S. Postal Service - the mail carrier of last resort. An analysis similar to the "99%" argument would show that the Postal Service has a majority "market share". That doesn't prevent the Postal Service from projecting a loss of $2.4 billion this year. If the Postal Service had real owners, they would be more concerned about its share of the **profitable** markets than how much of the population it serves.

In the downtown areas of Los Angeles and Orange County, San Francisco, San Diego, and Sacramento no fewer than four CAPs offer dedicated connections. These metropolitan areas represent only 5% of the land area of California yet generate over 80% of the business calling revenues. Our competitors don't have to serve more than one-twentieth of our geographic area to reach the vast majority of our business revenues.


CAP PRESENCE STATEWIDE
SACRAMENTO
★ EXISTING CAPS
▲ PLANNED CAPS
◆ COLLOCATION ORDERS
82 % OF BUSINESS REVENUES

Second, "99%" refers only to access charges paid by IXCs. It ignores access charges paid by end users (about 40% of our HICAP circuits are provided directly to end users, not IXCs), end users who use private networks of their own or of another provider (such as AT&T's MEGACOM or MCI's PRISM), cellular access, and perhaps most important the intraLATA self-supply capabilities of the IXC's own networks. Our largest and most formidable competitors aren't CAPs. They're our largest customers, the IXCs. Unlike our competitors, AT&T, MCI, and others, we don't have the luxury of pretending that IXCs' self-supply of access can be ignored in our market plans. Access is a "make or buy" decision for IXCs. As intraLATA competition is authorized, the attractiveness to IXCs of building their own intraLATA networks will increase.

Even if "access" were a single market, to calculate our share of traffic the following computation would be necessary:

$$\frac{\text{Switched + Special Access}}{\text{Switched + Special Access + CAP + IXC Self Supply + Cellular + Private}}$$

where the Switched and Special Access numbers are from the LEC, CAP refers to access provided by CAPs, IXC Self Supply is access provisioned by the IXCs themselves, Cellular is cellular access, and Private refers to the capacity in private networks that are not telecommunications providers (such as privately constructed networks, VSAT, and microwave).

The "99%", then, isn't 99% of the **profitable** markets, and it's not **99%** either. But how much smaller it is no one can determine until our competitors' ability to self-supply and other parts of the denominator are known. AT&T's enormous ability to self-supply can be garnered indirectly from the fact that its interoffice network in California is about twice the length of ours.

Third, "99%" refers to **revenue** rather than supply or demand. As the Commission recognized in Docket 90-132, revenue share is an indication, not a source of market power. In this case it's a very poor indication. For example, it assumes that a dollar of special access revenue represents the same share of the "market" as a dollar of switched access, which it obviously untrue.

Access services are fungible and widely resold. They're purchased by sophisticated customers, all of whom have alternatives including, for most, supplying themselves. For the carrier access market, market power is a function of each provider's capacity, not its current revenues - the fraction of the market that **can** be served by any provider.

Therefore, while our competitors make claims about the state of the access services market, the size of the market and the power of any provider - including us - is unknown because we're the only ones required to file information on switched usage and transmission capacity. What we **do** know about

the market for carrier access services indicates there's an **oversupply** of capacity. As MCI recently said, "every carrier that has built fiber capacity has installed plenty of extra capacity".[1] Peter Huber has estimated that no more than 10% of CAP fiber capacity is actually being used to carry traffic.

AT&T has been one of the chief propagandists of the "99%" factoid, yet it took a diametrically opposed position in Docket 90-132. Referring to the excess capacities of its competitors' networks, AT&T said that "the available capacity of ...competing carriers...is the most telling indicator of the strength of competition." They argued that "the existence of this excess capacity precludes the exercise of market power by any carrier - including AT&T." The Commission agreed with this analysis. Now AT&T advocates a market share test that's designed for us to fail even if we lost all of our profitable markets.

B. Competitive Markets in California

California cannot be considered one unsegmented market. It is so large, its population and businesses so diverse, its land area so varied, that it defies neat market classification. This is especially true in the California telecommunications market. Customers range from the residential users who only need POTS service with touch-tone to large business and government customers who require sophisticated voice, data, and image processing and transmission. Customers demand not only different types of services but widely different quantities as well. If every customer consumed a like amount of the same services, demand would be homogenous. For example, in order for a new competitive entrant to gain a 10% market, it would have to take away 10% of the demand from the incumbent. But demand is not homogenous. In telecommunications services, the distribution of revenues is highly concentrated: a small percentage of customers, lines, and facilities account for a disproportionate share of the revenues. Moreover, since the residential and business population is not randomly distributed over the California land mass, customer demand for these services tends to be highly concentrated in small geographic areas. This concentration enables competitive entrants with modest geographic serving areas to compete for a substantial share of revenues.

This section discusses the California telecommunications marketplace in terms of demand for services, paying particular attention to the way in which demand for services and revenues is distributed across different geographies. It discusses how the telecommunications market should be segmented. It concludes by looking at an overlay of CAP networks and serving areas, and discovers, not surprisingly, that their serving areas and Pacific Bell's dense, high volume, high revenue producing markets are virtually the same.

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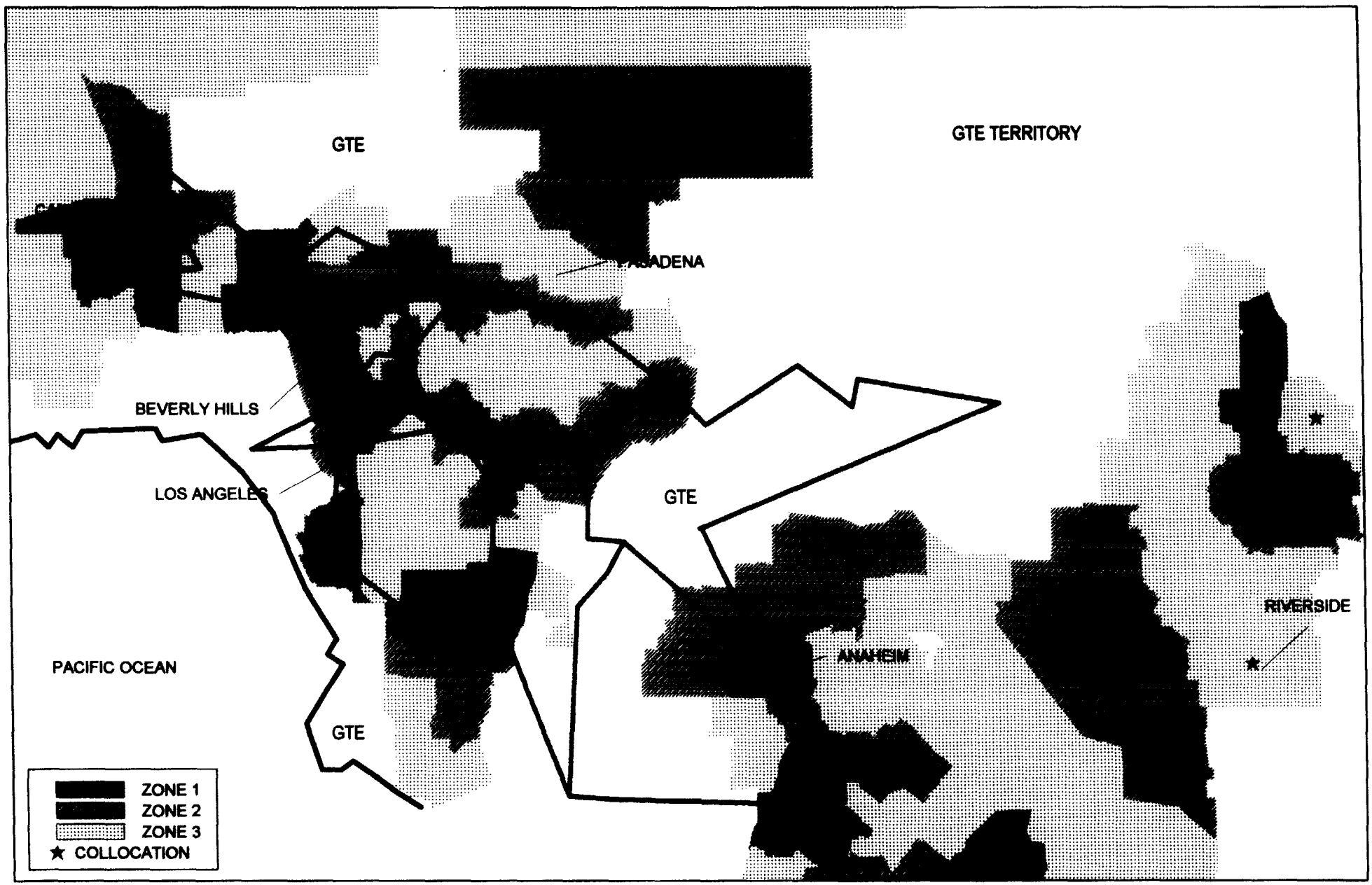
[1] MCI News Release, October 26, 1993, "Long Distance: Public Benefits from Increased Competition", Robert E. Hall, p. 23.

LOS ANGELES REGION - ZONES & ALTERNATIVE FIBER ROUTES



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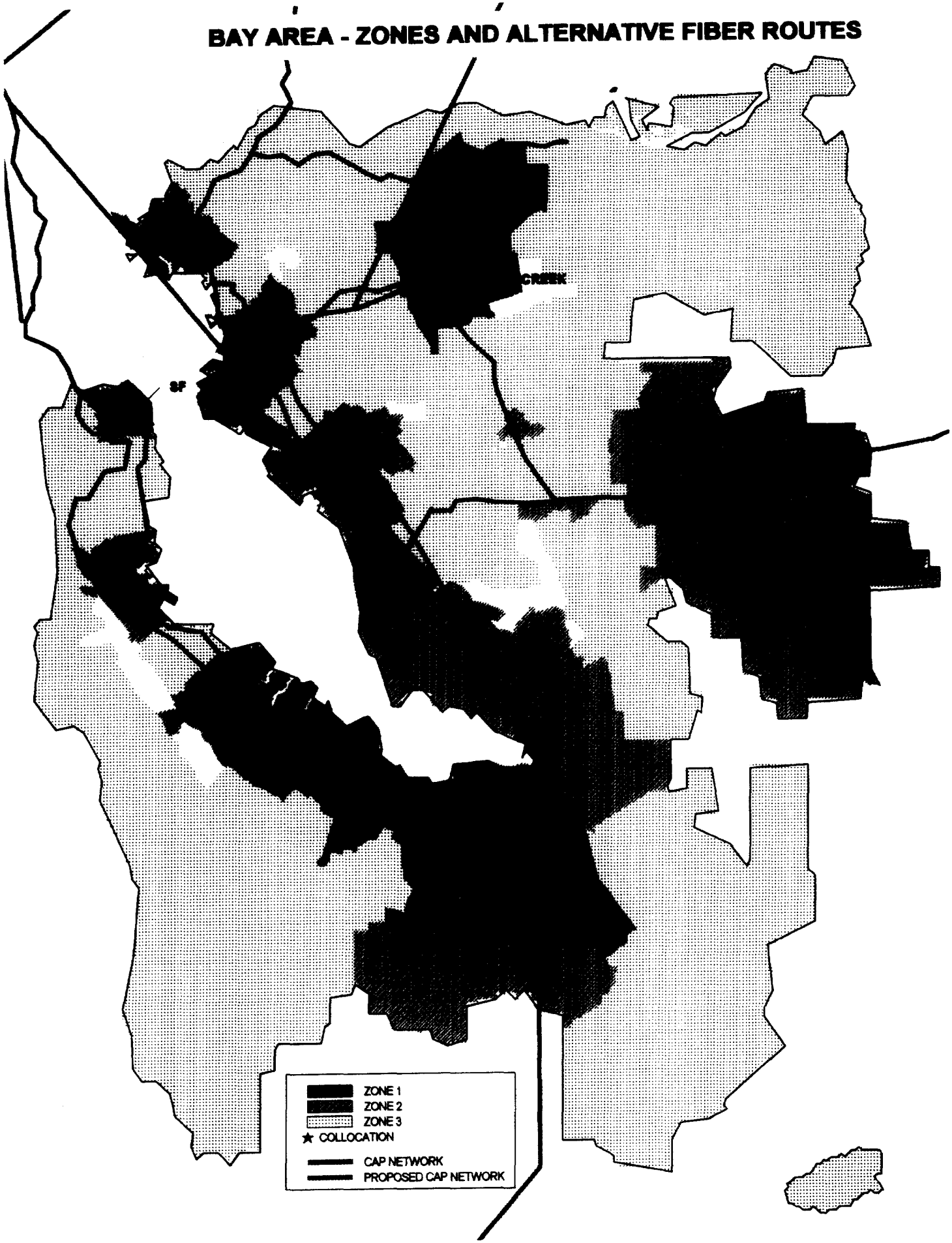


Relevant Markets

The geographic concentration of revenues in California, and the relative ease with which entrants can reach them, creates an environment ripe for new entrants to enter, gain a foothold, and skim these areas of concentration with little worry of a meaningful LEC response. The current rules don't permit it. Real competition in Redding, CA for HICAP services, where demand is weak, and unit costs are high, is negligible; competition in the dense, relatively low cost urban areas of Los Angeles, San Francisco, San Diego, and Sacramento is anything but. Fifty-nine percent of Pacific Bell's interstate HICAP circuits are in just 16 wire centers. As of the date of this report we have received orders for collocation in 14 of them.

The market for HICAP services is not the same in downtown San Francisco as it is in Redding. There is no one "California" market for HICAP, but many geographically smaller markets that are created by the supply and demand dynamics, and the costs, prices, and availability of substitutes in these particular market areas. The question really is one of identifying the characteristics of a geographically relevant market. Using the DOJ Merger Guidelines as an entry point of discussion which define the geographic component of an economic market, Prof. Schmalensee and Taylor conclude that "the LEC wire center is the smallest possible geographic area to which market power analysis can practically be applied." [2] They go on to show that if customers residing within the boundaries of the wire center have adequate alternatives available to them, the LEC cannot charge supra-competitive prices and therefore lacks market power. The showing required by the LEC under the USTA proposal for access reform is beyond the scope of this paper. But the concept of relevant markets is further examined below by looking at some of the demand and revenue characteristics of different markets, using the wire center as the level of aggregation of demand and revenues. The following section shows the way in which telecommunications services and revenues are distributed throughout California, paying particular attention to the way in which they correspond to wire center boundaries - to relevant markets - and to where the CAP efforts have been aimed at capturing these same markets.

[2] "Comments on the USTA Pricing Flexibility Proposal", March 28, 1994, Profs. Richard Schmalensee and William Taylor, p. 23.

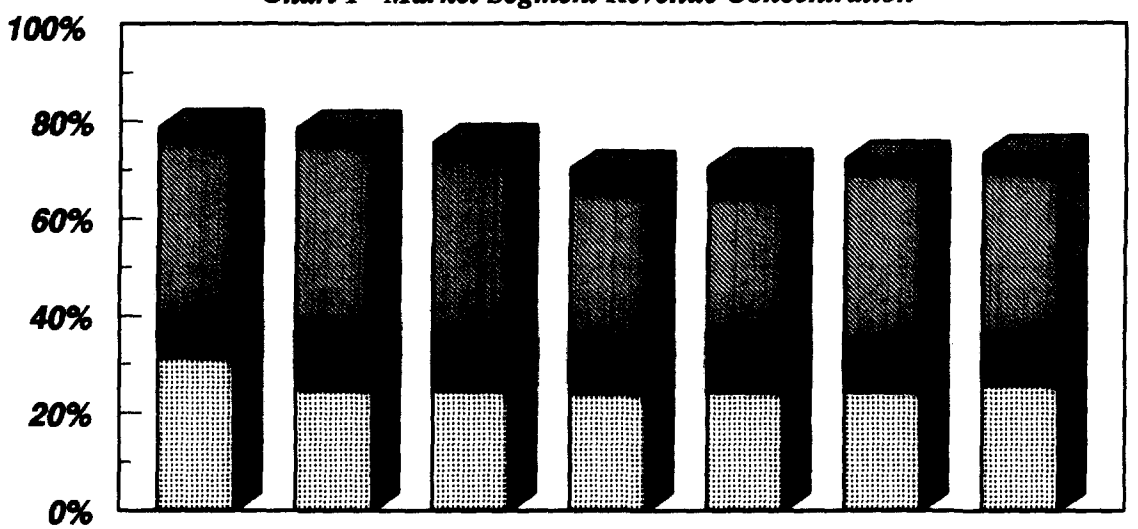
C. Market Concentration

In California:

- *1% of the land area produces 49% of the business calling revenues*
- *6.5% of the land area produces 90% of the business calling revenues*
- *Half of the business lines are in 10% of the wire centers*
- *Half of the business toll revenues come from customers in 11% of the wire centers*
- *Half of all end user access lines are in 15% of the wire centers*
- *One third of all interstate access minutes come from 8% of the wire centers*
- *90% of interstate HICAP circuits are in 12% of the wire centers*
- *As of September we have received orders or bona fide requests for collocation in 47 wire centers*
- *The four largest metro areas, Los Angeles, San Francisco, San Diego, and Sacramento account for 72% of Pacific's revenues.*

The wire centers in the four largest metropolitan areas of Los Angeles, San Francisco, San Diego, and Sacramento, account for nearly 80% of all business toll revenues and business access line demand, 75% of the switched access minutes, and nearly 90% of the HICAP demand in California. This demand concentration is further examined below, with a look at the concentration profiles of each area.

Chart 1 Market Segment Revenue Concentration



	LARGE BUSINESS	MEDIUM BUSINESS	SMALL BUSINESS	SPECIAL ACCESS	SWITCHED ACCESS	RESIDENCE	TOTAL
San Francisco	31.3%	24.7%	24.7%	23.9%	24.2%	24.2%	25.7%
San Diego	7.6%	11.4%	9.7%	10.1%	11.9%	10.7%	10.4%
Los Angeles	36.4%	38.0%	37.5%	30.0%	26.2%	33.1%	32.1%
Sacramento	3.0%	3.3%	2.9%	4.9%	6.2%	3.2%	4.0%
Total	78.3%	77.4%	74.8%	68.9%	68.5%	71.2%	72.2%

- *Chart 1 displays the revenue by market segment as a percentage of all Pacific Bell revenue*
- *Combined Metro Areas have 64 of the 77 offices that have been requested for collocation*

Another indication of the degree of demand concentration can be found by comparing the revenue and traffic volumes in those offices that have been tariffed for collocation, to those for all other offices. The table below gives a concentration index for various types of services. This index is equal to the average demand (or revenue) for the service in collocation offices divided by that in non-collocation offices, or:

$$INDEX = ((x/n)/(y/m))$$

where
- x = sum of the value for all collocation offices
- n = number of collocation offices
- y = sum of the value for all non-collocation offices
- m = number of non-collocation offices

Using business lines in service as an example, the total business lines in 75 offices tariffed for collocation might be 2.25 million, or an average of 30,000 per office. If the average number of business lines per office for those offices not tariffed for collocation is 4,300, then the business line index would be equal to 7 (30,000/4,300). The index is greater than one in all cases, and shows an increasing measure of concentration as the service continuum steps from residence services up through the services that large business customers use. This is no surprise; the offices targeted for collocation were not chosen haphazardly. The CAPs know where the large business customers are and intend to use collocation as one means of pursuing them.

Table 4 Concentration Index

SERVICE	INDEX
RES REVENUE	2.96
RES LINE IN SVC	3.04
INTER SWITCHED ACC MOU	3.23
BUS TOLL	6.21
TOTAL BILLED REV (EXCHANGE)	6.85
BUS LINE IN SVC	7.02
TOTAL BUSINESS REVENUE	7.42
PRIVATE LINE REVENUE	14.75
INTERSTATE SP ACCESS HICAP	21.83

2. The Competitive Ability of CAPs and Others

A. Introduction

The significance of CAPs is not related to their share of all local exchange revenues. It is their success in the limited number of profitable markets they have chosen to enter. Quality Strategies work in CAP market share studies in California indicate that CAPs have over 30% of the market for Special Access DS1-and-above services where customers have an alternative to Pacific Bell in the downtown areas of Los Angeles and San Francisco.

The California Public Utilities Commission first authorized CAPs to provide high speed intraLATA and interLATA special access service in California in 1989. Since that time, CAP growth has been nothing short of phenomenal. Nationwide, the CAP industry deployed 7 times as many fiber miles in 1992 as in 1988 *(table 1)*, much of it in the dense metropolitan areas of the Los Angeles basin and the San Francisco Bay Area. Since 1989, CAPs have grown, not only in scale but in scope. San Diego and Sacramento now have several CAPs presently operating, with more networks under development. The portfolio of services provided by CAPs has evolved and grown far beyond special access services to include a full spectrum of private line offerings from DS0 through DS3 speeds, SONET, LAN interconnection, Multi-Megabit Data Services (MDS), fractional DS1, and ISDN. The CAPs are also establishing a beachhead for switched services which will, by some industry estimates, take over as a major source of revenue by 1997. Their staggering 40% revenue growth rate in 1993 (industry revenues estimated at $350 million) keeps them on pace to top the one billion dollar mark by the end of the decade.

This section discusses who these companies are, what they offer, and where they market their products and services in California. It also describes their growth and how they plan on addressing the California market over the next several years.